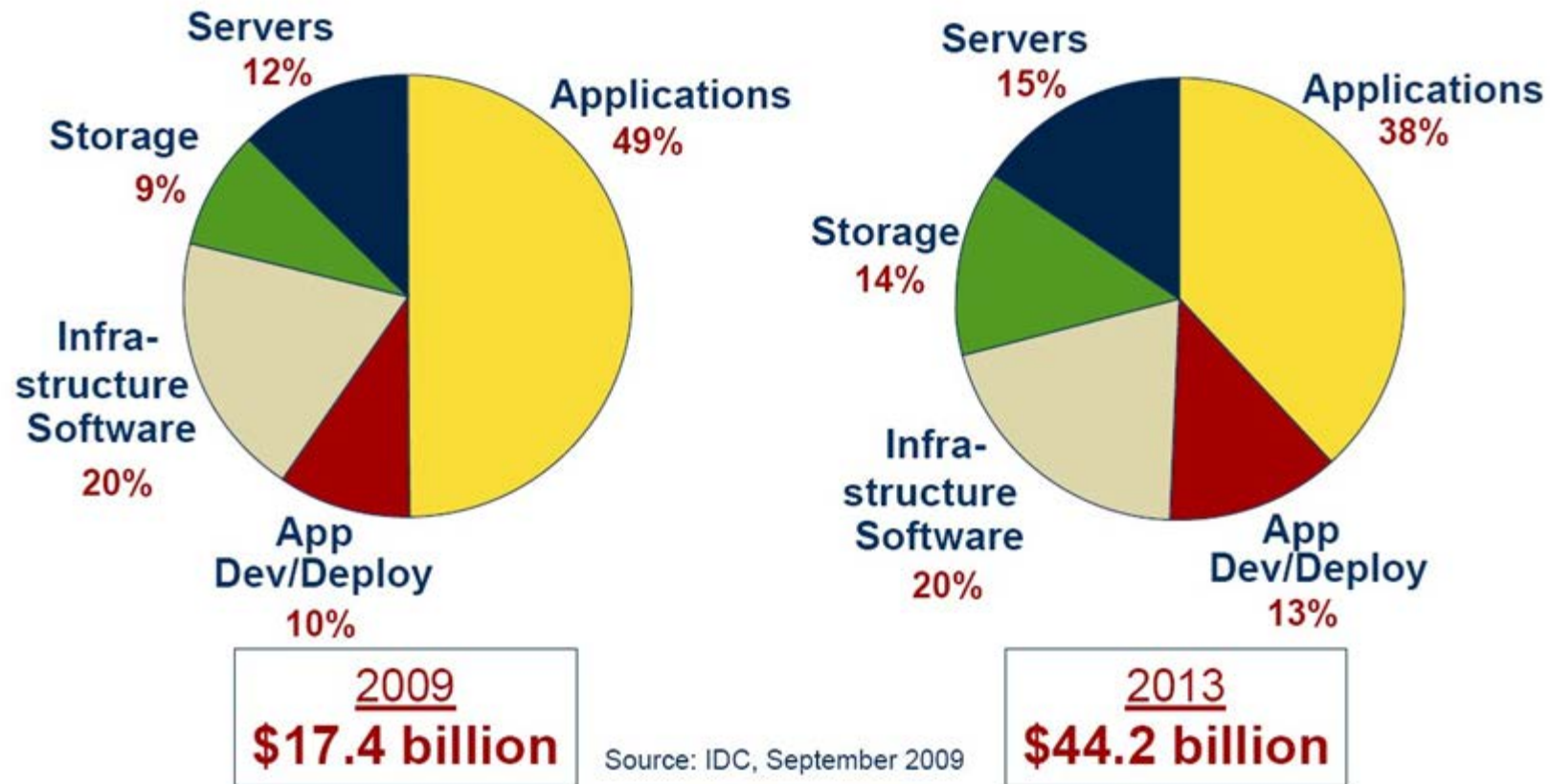# ECE 530 Cloud Computing

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Benefits of Cloud Computing

Cloud Distribution Examined

Worldwide IT Cloud Services Revenue* by Product/Service Type

2009 — $17.4 billion
Servers 12%, Storage 9%, Infrastructure Software 20%, App Dev/Deploy 10%, Applications 49%

2013 — $44.2 billion
Servers 15%, Storage 14%, Infrastructure Software 20%, App Dev/Deploy 13%, Applications 38%

Source: IDC, September 2009

* Includes revenue from delivery of Applications, App Development/Deployment SW, Systems Infrastructure SW, and Server and Disk Storage capacity via Cloud Services model; AD&D excludes online B2B messaging providers/exchanges

Benefits of Cloud Computing

- Reduce capital and operations costs
  - No longer required to make large up-front capital investment on datacenters
  - Eliminate the need to plan ahead for provisioning
  - Allow companies to start small and increase their resources investment as needed (pay-as-you-go)

- Simplify app deployment & management
  - Common programming model across mobile, browser, client, server, cloud
  - Access to strong ecosystem of widely deployed applications
  - Integration with existing IT assets (Software + Services)

Cloud Benefits

- Cloud offers low, pay-as-you-go pricing with no up-front expenses or long-term commitments.
- Cloud vendors build and manage a global infrastructure at scale.
  - They pass the cost saving benefits onto the clients in the form of lower prices.
- With the efficiencies of cloud scale and expertise, cloud vendors have been able to lower prices

Considerations of a Cloud Engineer

- Your instances will die

- You will share resources

- The architecture will change

- You will never see the lights…

Do NOT trust the Cloud